



UNITED STATES PATENT AND TRADEMARK OFFICE

MW

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,207	12/07/2001	Vincent G. Bovio	1826-AY	1385

7590

02/17/2004

Joseph A. Sebolt
SAND & SEBOLT
Aegis Tower, Suite 1100
4940 Munson Street NW
Canton, OH 44718-3615

EXAMINER

PHAN, HAU VAN

ART UNIT	PAPER NUMBER
----------	--------------

3618

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/021,207	Applicant(s) BOVIO, VINCENT G.	
	Examiner Hau V Phan	Art Unit 3618	<i>mw</i>

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 and 34 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19,20,23,40 and 41 is/are allowed.
- 6) ☒ Claim(s) 12-18,21,24-33,35-36 is/are rejected.
- 7) ☒ Claim(s) 22 and 37-39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgment

1. The extension of time filed on 12/18/2003 has been considered.
2. The requests for continue examination filed on 12/18/2003 has been considered.
3. The amendment filed on 12/18/2003 has been entered.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 12-18, 21, 24-33 and 35-36 rejected under 35 U.S.C. 103(a) as being unpatentable over Steensen (2,267,431).**

Steensen in figures 1-3, discloses a flexible exhaust pipe suspension for a vehicle exhaust system comprising a vibration insulator (10) having an outer surface, a front surface and a rear surface (figure 3). Steensen also discloses a heat shield (12) having a cup shaped body defining a chamber including an inner surface (figure 2). The heat shield and the vibration insulator being complementarily shaped and when the vibration is held within the chamber at least a portion of the outer surface and front surface lie in contact with the inner surface of the chamber. The heat shield adapted to thermally insulate the vibration insulator from an internal heat. Steensen discloses the

Art Unit: 3618

heat shield in metallic except for a flexible, non-metallic. It would be a matter related to the choice of ornamentation producing no mechanical effect and take advantage of that select material such as heat resistant, last long and flexible or advantage considered to constitute the invention are considered obvious and do not impart patentability. *In re Seid*, 73 USPQ 431.

Regarding claims 13-16 and 27-30, Steensen discloses a heat shield (12), which is made from a rigid material, but fail to show the heat shield made from a flexible, heat-resistant material, an elastomer, a silicone elastomer from a group ASTM D200, classification GE, FC, FE and FK. It would be a matter related to the choice of ornamentation producing no mechanical effect and take advantage of that select material such as heat resistant, last long and flexible or advantage considered to constitute the invention are considered obvious and do not impart patentability. *In re Seid*, 73 USPQ 431.

Regarding claims 17-18 and 31-32, Steensen discloses an insulator (10), which is made from a rubber, but fail to show the insulator, which is made from fluorolastomer and ethylene acrylic. It would be a matter related to the choice of ornamentation producing no mechanical effect and take advantage of that select material such as heat resistant, last long and flexible or advantage considered to constitute the invention are considered obvious and do not impart patentability. *In re Seid*, 73 USPQ 431.

Regarding claims 21 and 33, Steensen discloses the heat shield and insulator having an air space between them (figure 2).

Regarding claims 24-25, Steensen discloses the body of the heat shield having a shaped like a diamond with rounded corners (figure 2). The body includes straight sidewalls extending between the rounded corners.

Regarding claim 26, Steensen discloses an improved motor vehicle having a chassis (16) and an exhaust system. The exhaust system has an exhaust pipe (20) and a hanger (13) connecting the exhaust pipe to the chassis. Steensen in figures 1-3, discloses a vibration insulator (10) having an outer surface, a front surface and a rear surface (figure 3). Steensen also discloses a heat shield (12) having a cup shaped body defining a chamber including an inner lining (figure 2). The chamber sized to receive the vibration insulator so that the inner lining of the chamber contacts at least a portion of the outer surface and the front surface of the vibration insulator. The body adapted to shield the chamber from an external heat source.

Regarding claim 35, Steensen discloses the heat shield, which is frictionally secured to the vibration insulator.

Regarding claim 36, Steensen in figures 1-3, discloses a flexible exhaust pipe suspension for a vehicle exhaust system comprising a vibration insulator (10) having an outer surface, a front surface and a rear surface (figure 3). The vibration insulator includes at least one aperture (figure 2) extending from the front surface through to the rear surface. Steensen also discloses a heat shield (12) having a cup shaped body defining a chamber including a sidewalls and a bottom wall (figure 2). The bottom wall includes at least one hole therein (figure 2) and when the vibration is received within the chamber of the heat shield, the aperture in the vibration insulator substantially aligns

Art Unit: 3618

with the hole in the heat shield. Steensen discloses the heat shield in metallic except for a flexible, non-metallic. It would be a matter related to the choice of ornamentation producing no mechanical effect and take advantage of that select material such as heat resistant, last long and flexible or advantage considered to constitute the invention are considered obvious and do not impart patentability. *In re Seid*, 73 USPQ 431.

6. Claims 12-18, 21, 24-33 and 35-36 are alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over Steensen (2,267,431) in view of Arciero et al. (6,572,070).

Steensen in figures 1-3, discloses a flexible exhaust pipe suspension for a vehicle exhaust system comprising a vibration insulator (10) having an outer surface, a front surface and a rear surface (figure 3). Steensen also discloses a heat shield (12) having a cup shaped body defining a chamber including an inner surface (figure 2). The heat shield and the vibration insulator being complementarily shaped and when the vibration is held within the chamber at least a portion of the outer surface and front surface lie in contact with the inner surface of the chamber. The heat shield adapted to thermally insulate the vibration insulator from an internal heat. Steensen fails to show the heat shield in a flexible, non-metallic.

Arciero et al. in figures 9-10, teaches an exhaust system hanger isolator comprising a bracket (52) including a heat shield (84). The bracket could be a high temperature plastic. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the flexible exhaust pipe suspension of Steensen with the exhaust system hanger isolator comprising a bracket including a heat shield as

Art Unit: 3618

taught by Arciero et al. in order to reduce manufacturing and assembly cost, tunable vibration isolation characteristics and enhance vibration isolation performance.

Regarding claims 13-16 and 27-30, Steensen discloses a heat shield (12), which is made from a rigid material, but fail to show the heat shield made from a flexible, heat-resistant material, an elastomer, a silicone elastomer from a group ASTM D200, classification GE, FC, FE and FK. It would be a matter related to the choice of ornamentation producing no mechanical effect and take advantage of that select material such as heat resistant, last long and flexible or advantage considered to constitute the invention are considered obvious and do not impart patentability. *In re Seid*, 73 USPQ 431.

Regarding claims 17-18 and 31-32, Steensen discloses an insulator (10), which is made from a rubber, but fail to show the insulator, which is made from fluorolastomer and ethylene acrylic. It would be a matter related to the choice of ornamentation producing no mechanical effect and take advantage of that select material such as heat resistant, last long and flexible or advantage considered to constitute the invention are considered obvious and do not impart patentability. *In re Seid*, 73 USPQ 431.

Regarding claims 21 and 33, Steensen discloses the heat shield and insulator having an air space between them (figure 2).

Regarding claims 24-25, Steensen discloses the body of the heat shield having a shaped like a diamond with rounded corners (figure 2). The body includes straight sidewalls extending between the rounded corners.

Regarding claim 26, Steensen discloses an improved motor vehicle having a chassis (16) and an exhaust system. The exhaust system has an exhaust pipe (20) and a hanger (13) connecting the exhaust pipe to the chassis. Steensen in figures 1-3, discloses a vibration insulator (10) having an outer surface, a front surface and a rear surface (figure 3). Steensen also discloses a heat shield (12) having a cup shaped body defining a chamber including an inner lining (figure 2). The chamber sized to receive the vibration insulator so that the inner lining of the chamber contacts at least a portion of the outer surface and the front surface of the vibration insulator. The body adapted to shield the chamber from an external heat source.

Regarding claim 35, Steensen discloses the heat shield, which is frictionally secured to the vibration insulator.

Regarding claim 36, Steensen in figures 1-3, discloses a flexible exhaust pipe suspension for a vehicle exhaust system comprising a vibration insulator (10) having an outer surface, a front surface and a rear surface (figure 3). The vibration insulator includes at least one aperture (figure 2) extending from the front surface through to the rear surface. Steensen also discloses a heat shield (12) having a cup shaped body defining a chamber including a sidewalls and a bottom wall (figure 2). The bottom wall includes at least one hole therein (figure 2) and when the vibration is received within the chamber of the heat shield, the aperture in the vibration insulator substantially aligns with the hole in the heat shield. Steensen fails to show the heat shield in a flexible, non-metallic.

Arciero et al. in figures 9-10, teaches an exhaust system hanger isolator comprising a bracket (52) including a heat shield (84). The bracket could be a high temperature plastic. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the flexible exhaust pipe suspension of Steensen with the exhaust system hanger isolator comprising a bracket including a heat shield as taught by Arciero et al. in order to reduce manufacturing and assembly cost, tunable vibration isolation characteristics and enhance vibration isolation performance.

Allowable Subject Matter

7. Claims 19-20, 23 and 40-41 are allowed.
8. Claims 22 and 37-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments with respect to claims 12-33 and 35-41 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hau V Phan whose telephone number is 703-308-2084. The examiner can normally be reached on 7:30AM-4:00PM.

Art Unit: 3618

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Johnson can be reached on 703-308-0885. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

HP
January 27, 2004

Hauphan
1/28/04

**HAUPHAN
PATENT EXAMINER**